Patent Claims

1. A hydrojet for watercraft with the features:

a) the hydrojet (1) comprises a housing unit (3), which can be installed in the bottom of the watercraft and contains at least one said propeller (10) that can be rotated about a propeller axis (9) and delivers the water entering through a bottom-side intake opening (13) of the housing unit (3) through a bend (6) and through a bottom deflecting grid (16) arranged rotatably in a discharge opening (15) of the housing unit (3), which said discharge opening is flush with the bottom, and thus releases it under the housing unit (3);

b) the propeller (10) forms a pump (8), which is in functional connection with a drive (2, 2', 40) arranged outside the housing unit (3), at least with a pump housing section (5) of the housing unit (3); and

c) the axis of rotation (9) of the propeller has a slope angle α between 20° and 50° in relation to the bottom plate (20) as a horizontal base.

2. A hydrojet in accordance with claim 1, **characterized in that** the axis of rotation (9) of the propeller has a slope angle α between 25° and 40° in relation to the bottom plate (20) as a

horizontal base.

3. A hydrojet in accordance with claim 1 or 2, **characterized in that** the housing unit (3) of the hydrojet (1) comprises at least four said housing sections (4-7) connected with one another: an intake housing section (4), through which the water enters the pump (8), a tubular pump housing section (5) comprising the propeller (10), a bent housing section (6) for deflecting the flow of water, and a discharge housing section (7) provided with a pivotable bottom deflecting grid (16).

4. A hydrojet in accordance with claim 3, **characterized in that** above the intake opening (13), the contour of the intake housing section (4) forms a trapezoidal tunnel cross section (21), which forms a, circularly arched tunnel cross section (22) in the course of the further rise and then passes over, via a conical pump intake nozzle (23), into a circular cross section, which opens concentrically into the pump housing section (5) of the housing unit (3).

5. A hydrojet in accordance with claim 3 or 4, **characterized in that** the bent housing section (6) is a 90°pipe bend.

6. A hydrojet in accordance with one of the claims 1 through 5, **characterized in that** the drive (2, 2') of the pump (8) is an electric motor, which is fastened to the housing unit (3) either on the front side or axially in parallel to the propeller shaft (11).

7. A hydrojet in accordance with one of the claims 1 through 5, **characterized in that** the drive (40) of the pump (8) is an internal combustion engine, which is fastened to the housing unit (3),

wherein the drive (40) and the propeller shaft (11) are connected at least via a gear (42), which has its power input and power output on the same side.

8. A hydrojet in accordance with one of the claims 1 through 7, **characterized in that** a protective grid (24) is arranged in the intake housing section (4) of the housing unit (3).

9. A hydrojet in accordance with one of the claims 1 through 8, **characterized in that** the pump (8) in the housing unit (3) is a two-stage axial-flow pump, which has two said propellers (10) on the propeller shaft (11) and at least one said guide vane (26) located in between to rectify the flow.

10. A hydrojet in accordance with one of the claims 1 through 8, **characterized in that** the propeller (10) of the pump (8) is a variable-pitch propeller.